

IAP20 Rec'd FEB 17 2006

CLAIMS

[Received by International Bureau on November 29, 2004 (29.11.04). Amendments were made to claims 12-13 as originally filed. No changes were made to any other claims (2 pages).]

1. A first connector to be electrically connected to a second connector; said first connector comprising a first housing and conductive layers for making electrical connections on the surface of said first housing; said conductive layers having first contact surfaces contacting a wire core and second contact surfaces contacting contacts attached to said second housing; said first contact surfaces being aligned in a row, and said second contact surfaces being positioned alternately toward the front and rear with respect to the direction of insertion of the connector on the bottom surface of the first housing.
2. A first connector in accordance with claim 1, wherein said second contact surfaces extend from said first contact surfaces across the surface of the housing.
3. A first connector in accordance with claim 1 or 2, wherein said second contact surfaces extend from said first contact surfaces through through holes formed in the first housing.
4. A first connector to be electrically connected to a second connector; said first connector comprising a first housing in which are formed through holes having openings on a top surface and a bottom surface, and conductive layers for making electrical connections on the surface of said first housing, said conductive layers and through holes being positioned in alternating fashion and separate contacts being inserted into said through holes.
5. A connector in accordance with claim 4, wherein the contacts inserted into the through holes have first contact surfaces contacting a wire core and second contact surfaces contacting contacts attached to said second connector.

6. A first connector in accordance with claim 3, wherein said through holes are formed alternately with respect to conductive layers that pass across the surface.
7. A connector in accordance with any one of claims 1-6, wherein said conductive layers are formed by a MID.
8. A first connector in accordance with any one of claims 1-5, wherein said first housing has a conductive shell, and said shell is electrically connected to a shield of a conductive member connected to said first contact surfaces.
9. A first connector in accordance with any one of claims 1-8, having an engaging portion for engaging with the second connector on at least one end with respect to the direction of insertion.
10. A first connector in accordance with any one of claims 1-9, having a recess or a bump for fitting with the second connector.
11. A second connector to be electrically connected to a first connector; the second connector comprising a second housing affixed to a substrate, said housing having contacts, and said contacts being positioned in a mutually inverted relationship with adjacent contacts.
12. (amended) A second connector in accordance with claim 11, wherein the second connector has an engaging portion for engaging with the first connector on at least one end with respect to the direction of insertion of the first connector.
13. (amended) A second connector in accordance with claim 11 or 12, wherein the second connector has a bump or recess fitting with the first connector.
14. A connector consisting of a first connector in accordance with any one of claims 1-10, and a second connector in accordance with any one of claims 11-13.